

Attorney Docket No.: FMCE-P145

In the Specification:

Please amend the paragraph beginning on line 21 of page 1 as follows:

The standard control module used in today's systems is housed in a container filled with an inert gas such as Nitrogen and pressurised at 1 bar to protect the electronics of the system. It contains the electronics for receiving signals from the sensor devices and for transmitting signals to a control station at a production vessel, such as a floating production storage and offloading vessel (FPSO), or other remote location. All the electrical pilot valves are also housed in the control module. The supply ~~line~~ lines for hydraulic and chemical fluids are connected to the control module with lines extending therefrom to the hydraulic actuators and the chemical injection points as needed. This system is very inflexible. For example, it must be decided beforehand ~~for example~~ how many control valves will be needed. If more control valves will be needed then the control module must be pulled up and exchanged with a new and larger control module. Such an action requires the well to be shut down, resulting in lost production. Usually the control module is made larger than needed in case the system needs to be extended.

Please amend the paragraph beginning on line 28 of page 6 as follows:

Figure 7 is a schematic block diagram showing one possible wiring layout for the cable harness bus shown in Fig. 4[,]. It will be understood by those skilled in the art that in the interest of clarity[,] a number of details have been omitted from Fig. 7. In this illustrative embodiment, the system comprises a junction 93[,] and electrical connectors 90a, 90b and 90n connected to the

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junction. Each of the electrical connectors is connectable to a device or module of any of the various types described above with respect to ~~Fig.~~ Figs. 2 and 4. Complementary connectors such as ~~92~~ 90a' and 90n' are associated with the modules~~[[.]]~~ and connected to the electrical connectors in a manner well known in the art.

Please amend the paragraph beginning on line 19 of page 7 as follows:

Control supply lines 106a and 106b extend from junction 93 to connector 90n. Lines 106a and 106b are electrically connected to each other at the electrical connector 90n. Similarly, control return lines 102a and 102b extend from junction 93 to connector 90b. Lines 102a and 102b are also electrically connected to each other at the electrical connector 90n. Finally, power supply line 114a and power return line 114b extend from junction 93 to electrical connector 90n. In this particular embodiment, electrical connector 90n is a termination point. The corresponding complimentary connector ~~95~~ 90n' is not associated with a module. Connector ~~95~~ 90n' includes a load resistor 118 across the control supply and return lines to balance the system impedance.

Please amend the paragraph beginning on line 14 of page 8 as follows:

Referring again to ~~fig.~~ Fig. 5, each module ~~39~~ 14, 36, 37, 38 includes a communication unit or bus controller that communicates according to the protocol on the control line 33. This may be a ~~CAN-bus~~ controller area network (CAN) bus or any other suitable bus communication protocol. In order to enable communication, the communication unit comprises a microprocessor or other data processing arrangement which is operatively controlled by executable code,

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including bus driver code, which is included in a memory. If a CAN-bus is used, the bus controller would be a CAN-bus controller and the bus driver would be a CAN-bus driver. The memory unit may comprise ~~RAM, Programmable Read-Only Memory (PROM), EPROM, EEPROM~~ random access memory (RAM), programmable read-only memory (PROM), erasable programmable read-only memory (EPROM), electrically erasable programmable read-only memory (EEPROM), or any other suitable type of memory unit. Clearly, other bus types can be employed. In other embodiments the memory unit may be reprogrammable from a remote location to facilitate upgrades and/or extensions of the system.